

The U.S. Geological Survey (USGS) collects, analyzes, and publishes information about the Nation's mineral, land, and water resources. Some of this earth science information is available as educational material in a variety of books, posters, fact sheets, and resources lists. The following lists some products you may want to use. Some of the educational materials are available on the USGS World Wide Web.

## Teacher Packets

Request the following teaching material on school letterhead, indicating the grade level and subject of interest.

**Exploring Maps**—An interdisciplinary set of materials on mapping for grades 7-12 designed to aid in teaching basic map-making and map-reading skills. Includes a teaching guide, four activity sheets, and two posters.

**Global Change**—This middle school packet covers four themes: time, change, cycles, and the Earth as home. Includes a color poster and three activities. Each activity includes background information, an experiment, suggestions for further reading, and exercises that can be used as extensions.

**MapAdventures**—This packet is appropriate for grades K-3. Students will learn basic concepts for visualizing objects from different perspectives and how to understand and use maps. Includes a poster, a teaching guide, seven lesson plans, and two activity sheets.

**What Do Maps Show?**—Includes a color poster with four accompanying lessons for geography and map reading appropriate for upper elementary to junior high school. Also includes lessons, three reproducible maps, and three reproducible activity sheets.

Send requests to:

USGS Information Services  
Box 25286  
Denver, CO 80225  
E-mail:  
BusinessPartners@Rmml.cr.usgs.gov

**Teacher's Packet of Geologic Materials**—A selection of leaflets, booklets, and reference lists on a variety of earth science

topics such as earthquakes, volcanoes, ground water, erosion, and glaciers. Also includes a list of references on the geology of each State.

**Selected Packet of Geologic Teaching Aids**—A variety of leaflets on selected earth science topics such as rock collecting, erosion, the interior of the Earth, and landforms. Also includes a list of references on the geology of each State.

Send requests to:

U.S. Geological Survey  
Geologic Inquiries Group  
907 National Center  
Reston, VA 20192

## Booklets

**Helping Your Child Learn Geography**—This 25-page booklet, published in cooperation with the U.S. Department of Education, is designed to help parents stir children's curiosity toward geographic questions and knowledge. The activities can also be used in the classroom.

**Fossils, Rocks, and Time**—This 24-page booklet explains the basics of how fossils are used in establishing time sequence in geology. Accompanies the poster "Fossils Through Time."

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## Posters

**Natural Hazards Poster Set**—Five large posters showing volcanic eruptions, earthquakes, landslides, mudflows, and flooding. Eighteen photograph cards bring to life the effects of natural events, such as damaged buildings, mud-plastered trees, and blocked roads.

**Fossils Through Time**—A poster depicting the diversity and evolution of life on Earth during the last 600 million years.

**Map Projections**—This poster shows properties, characteristics, and preferred uses of many historically important projections and of those frequently used today.

**Planetary Maps**—A two-sided poster showing a part of a geologic map of the near side of the Moon on one side and the variety of maps available of the Moon and Mars and some of Earth's other neighboring planets and their satellites on the other side.

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## Water Resources Education Series Posters

Each poster listed below has three versions—two in color, for elementary and middle school, and one in black and white that can be colored by students. The colored versions have activities, definitions and discussion, and interpretive questions on one side. The posters can be joined to create a wall mural.

**How Do We Treat Our Waste Water**—Depicts the process by which wastewater is treated in cities, small towns, and rural areas.

**Ground Water: The Hidden Resource**—Shows the places where an aquifer receives its water and the movement of water from these places to the areas where it flows to the land surface or to surface water bodies such as rivers, ponds, or springs.

**Navigation: Traveling the Water Highways**—Highlights different kinds of vessels, port facilities, structures, and equipment needed for commercial operations on rivers and in coastal harbors. It is designed to introduce students to the myriad aspects of navigation.

**Water: The Resource That Gets Used and Used and Used For Everything**—Depicts 12 uses of water from mining to transportation. Shows the flow of water from the mountains through a reservoir, past urban, rural, and industrial settings where various uses are shown. This is available also in Spanish.

**Water Quality: Potential Sources of Pollution**—Depicts human activities associated with the sources of water pollution. It also displays the movement of pollutants from their sources to surface and

ground water and the movement of water between streams and the underlying aquifer.

**Hazardous Waste: Cleanup and Prevention**—Depicts various hazardous waste sites and different types of cleanup methods used on these sites and how hazardous waste moves once it's released in the environment.

**Wetlands—Water, Wildlife, Plants, and People!**—Shows general types of wetlands and demonstrates how people and wetlands can benefit by living together. The diversity of plants and animals in wetlands is also shown.

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BusinessPartners@Rmmcl.cr.usgs.gov

## Fact Sheets

**Drought**—This fact sheet provides information on what droughts are, where they usually occur in the United States, and what can be done to solve water problems during periods of drought. OF 93-642

**Floods and Flood Plains**—Describes flood plains, factors that influence when or where floods occur, and how flood damage can be reduced. OF 93-641

**USGS Tracks Acid Rain**—Explains what acid rain is, how it's formed, and its effects; and also gives some information on what can be done to help control acid rain. FS 183-95

**What is Ground Water?**—Explains how water gets into the ground. Associated terms such as water table, aquifer, permeability, and porosity are illustrated and explained. OF 93-643

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## CD-ROM's

**GeoMedia**—Designed to teach children ages 10 to 14 about earth science. Developed jointly between USGS and InterNetwork Media, the program includes information in six areas: Understanding Maps, Time and Change, The Greenhouse Effect, the Carbon Cycle, Earthquakes, and

the Water Cycle. GeoMedia, available for Windows or Macintosh platforms, can be used in a classroom setting or on your own. The cost is \$49.95 plus tax and \$3.00 shipping, and can be ordered from:

InterNetwork Media, Inc.  
411 Seventh St.  
Del Mar, CA 92014-3013  
Phone: 888-755-3041  
Fax: 619-481-8181  
E-mail: inm@in-media.com

**Topographic Field Trip of Washington, D.C.**—Designed for middle school students to travel through Washington, D.C., by way of hypermedia to navigate through layers of information and link sounds, graphics, text, animation, and interactivity in a game-like adventure. Students will learn to measure distance and direction, determine latitude and longitude, learn map features, look at digital orthophotos, determine elevations, and examine historical maps. This CD-ROM is designed for use with a Macintosh computer system.

Teachers can obtain the free CD-ROM by requesting it on school letterhead addressed to:

USGS Information Services  
Box 25286  
Denver, CO 80225  
E-mail:  
BusinessPartners@Rmmcl.cr.usgs.gov

## Resource Lists

**U.S. Geological Survey Sales Publications That Are Especially Useful to Teachers**—This list includes maps and books on topography, geology, seismicity, tectonics, coastal erosion, soils, water, volcanoes, energy resources, and aerial photographs. Most items listed sell for less than \$10.

**Careers in Earth Science**—A variety of pamphlets, leaflets, and books describing various career opportunities in earth science are contained in this reference list. Many are published by professional societies (addresses included) and made available free or for a minimal cost.

**Volcano Information for Classroom Use**—Describes booklets available from the USGS on volcanoes that can be used by students and teachers. Most items are free.

**Earthquake Information for Classroom Use**—Describes leaflets and booklets available from the USGS on earthquakes that can be used by students and teachers. Most items are free.

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907 National Center  
Reston, VA 20192

## For More Information

Visit the USGS Learning Web for K-12 and life-long learning audiences. This web site focuses on living, learning, and exploring the web of life.  
<URL: <http://www.usgs.gov/education/>>

Exploring Maps  
<URL: <http://www.usgs.gov/education/learnweb/Maps.html>>

Global Change  
<URL: <http://www.usgs.gov/education/learnweb/GC.html>>

What Do Maps Show  
<URL: <http://www.usgs.gov/education/teacher/what-do-maps-show/index.html>>

Teacher's Packet of Geologic Materials  
<URL: <http://geology.er.usgs.gov/eastern/teachers.html>>

Selected Packet of Geologic Teaching Aids  
<URL: <http://geology.er.usgs.gov/eastern/teachers.html>>

Water Resources Education Series Poster  
<URL: <http://h2o.usgs.gov/public/outreach/OurReach.html>>

U.S. Geological Survey Sales Publications That Are Especially Useful To Teachers  
<URL: <http://geology.er.usgs.gov/eastern/teach.html>>

Selected References on Careers in Earth Science  
<URL: <http://geology.er.usgs.gov/eastern/careers.html>>

For information on other USGS products and services, call 1-800-USA-MAPS, e-mail [esicmail@usgs.gov](mailto:esicmail@usgs.gov), or fax 703-648-5548.

Receive information from the EARTHFAX fax-on-demand system, which is available 24 hours a day at 703-648-4888.

The address for the USGS home page is  
<URL: <http://www.usgs.gov/>>